Self-perceived gender discrimination by university Education students. Listening to student voices

Discriminaciones de género autopercibidas por alumnado universitario de Educación. Escuchando sus voces

Discriminações de género autopercecionadas por alunos universitários de Educação. Ouvindo as suas vozes.

聆听他们的心声：教育系大学生对性别歧视的自我感知

Larruzea-Urkixo, Nerea[1] ⓘD**, Díaz-Iso, Ariane[2]** ⓘD**, Velasco, Erlantz[2]** ⓘD**, Cardeñoso, Olga[1]** ⓘD

[1] University of the Basque Country (UPV/EHU), Spain.
[2] University of Deusto, Spain.

Abstract

Gender discrimination is recognised as a problem for societies around the world. It occurs in both public and private spheres, and manifests itself in visible and hidden ways, contributing to the perpetuation of inequalities between men and women (UNESCO, 2017). The main objective of the present study is to identify and analyse the situations and self-talk associated with self-perceived gender discriminations in everyday life. 141 Primary Education degree students (102 women and 39 men) took part in the study. The influence of different independent variables such as gender, the year in which the degree was undertaken and academic performance were examined in order to determine their influence on social representations of discrimination. The techniques used were the self-identification of situations and emotions, together with the thought listing technique. The lexical analysis of data was carried out using IRaMuTeQ software. Outcomes revealed four types of gender discrimination in both public and private spheres. On the one hand, in the private sphere, subjective perceptions of activities or tasks deemed appropriate for women were reported. On the other hand, in the public sphere, students reported perceiving women to be worse drivers, verbal aggressions and threatening looks towards women in the street, and discriminatory attitudes in the nightlife setting. These topics were identified by participants, regardless of gender, although specific perceptions differed. Findings of the present research highlight the need to influence gender equality training for future teachers in order to build a fairer and more equitable world.

Keywords: Gender discrimination, stereotypes, self-talk, higher education.

Resumen

La discriminación de género se reconoce como un problema para las sociedades de todo el mundo; tiene lugar en los ámbitos tanto público como privado, y presenta manifestaciones de carácter visible y también oculto que contribuyen a perpetuar las desigualdades entre hombres y mujeres (UNESCO, 2017). Este trabajo tiene como objetivo principal detectar y analizar las situaciones y los autodiálogos asociados a la discriminación de género autopercibida en la vida cotidiana por 141 estudiantes (102 mujeres y 39 hombres) que estudian el Grado en Educación Primaria. El estudio incluye el análisis de diferentes variables independientes como el género, el curso y el rendimiento académico de cara a conocer su influencia en la representación social de la desigualdad. Las técnicas empleadas fueron la identificación personalizada de situaciones y emociones relacionadas con la vivencia de la discriminación de género, junto con el listado de pensamientos asociados directamente con ellas. El análisis lexical de los datos se ha llevado a cabo mediante el software IraMuTeQ. Los resultados obtenidos muestran cuatro temáticas identificadas por el alumnado que responden a desigualdades de género en los ámbitos público y privado. Por una parte, en lo relacionado con la esfera privada, se refleja la percepción subjetiva de actividades o tareas atribuidas a las mujeres. Por otra parte, en el ámbito público, el alumnado identificó la percepción de una peor conducción por parte de las mujeres; las agresiones verbales; y miradas a mujeres en la calle y actitudes discriminatorias en el contexto de ocio nocturno. Estas temáticas fueron identificadas por hombres y mujeres, si bien la percepción sobre ellas era distinta. Los hallazgos de este trabajo ponen de manifiesto la premura de incidir en la formación del futuro profesorado en materia de igualdad de género en aras de construir un mundo más justo y equitativo.

Palabras clave: discriminación de género, estereotipos, autodiálogo, Educación Superior

Corresponding author / Autor de contacto: Nerea Larruzea Urkixo. Faculty of Education of Bilbao (UPV/EHU).
Barrio Sarriena s/n, 48940 Leioa, Spain. correo-e: larruzeaurkixo.nerea@gmail.com

Resumo

A discriminação de género é reconhecida como um problema para as sociedades de todo o mundo; ocorre nas esferas tanto pública como privada, e apresenta manifestações de caráter visível e também oculto que contribuem para a perpetuação das desigualdades entre homens e mulheres (UNESCO, 2017). O principal objetivo deste trabalho é detetar e analisar as situações e os autodiálogos associados à discriminação de género autopercecionada na vida quotidiana por 141 estudantes (102 mulheres e 39 homens) que estudam para obterem uma licenciatura no Ensino Primário. O estudo inclui a análise de diferentes variáveis independentes tais como o género, o curso e o desempenho académico, a fim de conhecer a sua influência na representação social da desigualdade. As técnicas utilizadas foram a identificação personalizada de situações e emoções relacionadas com a vivência da discriminação de género, juntamente com a listagem de pensamentos diretamente associados a elas. A análise lexical dos dados foi realizada utilizando o software IraMuTeQ. Os resultados obtidos mostram quatro temas identificados pelos alunos que respondem a desigualdades de género nas esferas pública e privada. Por um lado, no que diz respeito à esfera privada, reflete-se a perceção subjetiva de atividades ou tarefas atribuídas às mulheres. Por outro lado, na esfera pública, os alunos identificaram a perceção de pior condução por parte das mulheres; as agressões verbais; e olhares para mulheres na rua e atitudes discriminatórias no contexto da vida noturna. Estas questões foram identificadas por homens e mulheres, embora a sua perceção sobre elas seja diferente. As conclusões deste estudo sublinham a urgência de incidir na formação dos futuros professores em matéria de igualdade de género, a fim de construir um mundo mais justo e equitativo.

Palavras-chave: discriminação de género, estereótipos, autodiálogo, Ensino Superior

摘要

性别歧视是世界公认的社会问题，它既存在于公共领域也存在于私人领域。因为它的显性和隐形特征，男女间的各种不平等才得以一直持续（联合国教科文组织，2017 年）。样本由小学教育本科的 141 名学生（其中 102 名女性，39 名男性）组成。该研究对样本学生日常生活中在性别歧视自我感知方面的情况和自我对话进行分析和查验。该研究包含了对不同独立变量的分析，如性别、年级、学业表现，以此了解它们对社会不平等表现的影响。研究使用个人识别技术，借助与该情况直接相关的想法表单，对与性别歧视经历相关的情况和情绪进行个人识别。我们使用 IraMuTeQ 软件对数据进行词法分析。分析结果展示出了学生在公共和私人领域回应性别歧视的四大主题。其中一方面是关于在私人领域对归属于女性任务和活动的主观想法。另一方面是在公共领域，分析指出人们认为女性的驾驶技术更差，存在语言暴力，在夜生活中有对女性的歧视态度和过多的目光打量。虽然男性和女性对这些主题的想法不尽相同，但是在对两者的分析中都有一定的体现。该研究发现指出对未来教师在性别平等方面的培训十分必要，因为只有这样才能建立一个更加公平平等的世界。

关键词: 性别歧视、刻板印象、自我对话、高等教育

Introduction

Gender equality is not only a fundamental human right but, also, one of the essential foundations for building a peaceful, prosperous and sustainable world. This is the basis for the fifth goal of the 2030 Agenda for Sustainable Development of the United Nations Educational, Scientific and Cultural Organisation (hereinafter, UNESCO), focused on gender equality and women's empowerment (UNESCO, 2017).

Violence against women and girls remains one of the most widespread and persistent human rights violations today. Gender discrimination is defined as any unfavourable and unfair treatment based on a person's gender and is recognised as a form of inequality and a problem for women around the world. Women and girls represent half of the world's population and, therefore, also half of its potential (UNESCO, 2017).

While there have been a number of advances in gender equality in recent decades, discrimination occurs in a variety of ways which are based on the same idea and structure but take different forms and means of expression. Some of these are more visible and easily perceived, while others are more

invisible or elusive (Ballarín, 2017; Medina et al., 2015).

Gender discrimination: moving from the private to the public sphere

Some expressions of gender discrimination take place in the public sphere, while others occur in the private sphere (Frías, 2014; UNESCO, 2017). One of the most prominent areas of discrimination has historically been linked to the organisation of everyday care activities in the private sphere (Del Castillo & Corral, 2011; UNESCO, 2021). In addition to care activities, cooking, cleaning and clothing tasks have been associated with the female gender. In contrast, DIY and outdoor tasks, among others, have been viewed as men's work. Although this situation is more flexible nowadays, women are still encouraged to be more involved in the domestic setting and men are more highly placed in productive employment (Hagqvist et al., 2017).

As for the public sphere, gender discrimination often occurs in spaces for leisure and socialising (such as bars and clubs). As Burgos et al. (2018) notes, sexuality has been socialised in an unequal way in these settings, which normalises and sustains discrimination against women. This form of discrimination takes place in different settings, ranging from advertising campaigns and marketing strategies (Ordóñez Laclé, 2021) to entry requirements to entertainment venues involving gender-based discounts (Burgos et al., 2018). Sometimes these contexts place women in ambivalent situations, since what may be considered to be beneficial at first sight (for example, having a discount on drinks), may turn out to be a discriminatory strategy. In the latest study carried out by the Observatorio Noctambul@s [1] funded by the Spanish Ministry of Health, Consumption and Social Welfare (Burgos et al., 2018), almost all of participating women reported having suffered some kind of male violence. Interestingly, this figure decreases according to the level of social

rejection or de-normalisation of violence. In other words, more normalised and subtle forms of violence, such as awkward comments, happen more frequently and to a greater extent than more visible and socially condemned forms of violence, such as non-consensual fondling or forceful grabbing. It seems that certain types of discrimination may even go unnoticed within certain settings because they have become socially naturalised.

A form of highly visible discrimination in the public space is related to street harassment, another example of a type of harassment that emphasises women's bodies in a disproportionate way compared to their other facets. This is related to that described above in that it is an exercise of power and control that also entails aggression against women. These forms of violence invade women's privacy and cause them to feel unsafe in many instances of their daily lives (Vera-Gray, 2016).

Finally, social perceptions of driving skills continue to perpetuate gender stereotypes in the public sphere. Simon and Corbett (2007) found gender differences regarding driving to be an expression of gender roles, with the female role seen as passive, non-competitive and non-risk-taking, whilst the male role is perceived as risk-taking, competitive, aggressive and non-conformist. However, the stereotype pertaining to women behind the wheel has yet to be explored in depth in either the adult or adolescent population, although some research has shown that the stereotype is adopted more by male drivers (Derks et al., 2011) and may have an effect on driving behaviour. For example, one study showed that the stereotypical belief that women are bad drivers leads to poorer driving performance in women when driving in a simulator (Yeung & Von Hippel, 2008).

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[1] Observatory on the relationship between drug use and sexual violence in nightlife settings.

Gender socialisation, subjectivity and self-talk

According to Vygotsky (1973), socialisation plays a major role in people's functioning. Gender is one of the most important social variables, since it is the mechanism by which people internalise, assimilate and absorb the meanings socially attributed to their biological characteristics, which affects the perceptions, feelings, attitudes and behaviours deemed appropriate for each gender in all spheres of society (Del Castillo & Corral, 2011). It can, therefore, be stated that people's opportunities for mental and emotional development are mediated by the cultural environment in which they live (Cardeñoso, 2011).

But how can one detect and perceive this subjectivity, this emotional and mental development? Self-talk provides one of the most significant phenomena for grasping and recognising such development (Vygotsky, 1973). This can be defined as the inner conversation that individuals hold with themselves, in their mind, in everyday life situations. This internal conversation mediates and regulates the individual's own emotions and actions (Calvete et al., 2005; Morin et al., 2018). For example, when one is on their way to work, they can say to themselves 'today will be a good day!' or 'I can't wait for today to end and for the weekend to start!' (Larruzea-Urkixo et al., 2020, 2021).

As a consequence of this acculturation process, most studies have shown that men and women tend to demonstrate different ways of perceiving reality and communicating with themselves, although one exception to this is seen in recent research conducted by Stoyanova et al. (2017). In terms of thought valence, women are inclined to have more negative self-talk than men in everyday life situations (Calvete et al., 2005; Calvete & Cardeñoso, 2002). More specifically, women tend to have more negative thoughts which are related to and anchored in their need for acceptance by other people and their tendency to self-sacrifice (Cardeñoso, 2006). Men, on

the other hand, are more inclined towards the inner experience of thoughts related to anger and violence (Cardeñoso, 2006; Cardeñoso & Calvete, 2004), and thoughts to do with minimising problematic situations.

Gender discrimination: impact on education

Considering the social origin of gender discrimination, several studies have shown the impact that the school system has on the gender socialisation of students (Larruzea-Urkixo et al., 2021; Popa & Bucur, 2014). Gender stereotypes take root at school as this is the setting in which individuals learn to behave appropriately according to their gender and think in a certain way. This is reflected in personal self-talk, according to messages delivered through words and tones of voice, gestures and ways of approaching people or expectations, amongst other factors (Flores-Hernández et al., 2016).

As a result, some initiatives have been launched to promote equality in the educational context, including the fourth goal of the 2030 Agenda for Sustainable Development (UNESCO, 2017). This goal highlights the importance of teacher education as a learning model for students through the key roles teachers play in transmitting values, expectations, attitudes, knowledge and, ultimately, developing human potential and skills (UNESCO, 2017, 2021).

Previous studies have shown that most teachers, both in initial training and in practice, are aware of and committed to gender equality (Alvariñas Villaverde & Novoa Pérez, 2016; Mosteiro García & Porto Castro, 2017), although discriminatory practices persist in different educational contexts (Flores-Hernández et al., 2016). Some research conducted with prospective teachers has also revealed that they have difficulty in establishing what discrimination itself means (Popa & Bucur, 2014). More current studies have shown that university students deny the existence of inequalities (Verge et al., 2018) or display an unrealistic view of the situation (Miralles-Cardona et al., 2020). In terms of the situation in school settings, one piece of

research has suggested that sexism is a problem of which neither teachers nor pupils are aware. It is, therefore, difficult for them to address an issue that they have neither experienced nor perceive as a problem (Nava & López, 2010). This has serious implications for professional practice, as teachers without sufficient awareness will not be in a position to think critically, or recognise discriminatory acts and develop the necessary skills to educate future generations in equality (Miralles-Cardona et al., 2020).

It has also been found, although to a lesser extent, that university students recognise that gender discrimination is more often than not directed at women. This population group has been taught to reject traditional gender stereotypes, with it also being noted that student awareness of the issue increases as students progress through their degree (Popa & Bucur, 2014). Other studies have also found that individuals generally perceive themselves to experience little gender discrimination, although men report slightly lower levels (Alvariñas Villaverde & Novoa Pérez, 2016).

The main aim of the present study was to analyse experiences of gender discrimination perceived by prospective teachers in their daily lives. This was addressed through the following objectives: (1) identify the self-talk and self-reported emotions associated with experiences of gender discrimination; and (2) explore differences according to gender, academic achievement and degree year.

Method

Participants

The present study analysed a total of 136 situations, thoughts and emotions identified by a convenience sample of 141 students (102 females and 39 males) undertaking the first, second, third and fourth years of a degree in Primary Education. Average age of the participants was 20.16 years (SD=2.22), with an age range of 18 to 35 years.

In order to investigate potential differences according to the independent variables, participants were asked to specify their year of study (first, second, third or fourth year). Participants were also asked to indicate their academic performance by sharing their average degree mark. This was divided into three categories: low (marks below 7), medium (marks between 7 and 8) and high (marks above 8). Decisions on performance levels were made on the basis of the mark distribution reported by participants. Thus, academic performance ranged from 6 to 9.37, with an average of 7.59 (SD = 0.62). Of the 141 participants, 95.74% (n = 135; 99 females and 36 males) provided their marks. Specifically, 10 students (6 females and 4 males) had low academic performance, 85 (59 females and 26 males) were in the medium academic performance category and 40 (34 females and 6 males) were in the high academic performance category.

Data collection procedure

The research project was presented to students undertaking a degree in Primary Education by going to their classrooms at the end of a teaching session and inviting them to participate. They were informed that participation would be voluntary and anonymous, and no incentives were offered for participation. All students agreed to participate and were taken to the computer room where they were given a brief explanation of the study variables. The presentation covered issues such as self-talk and gender discrimination. No specific examples were provided in order to avoid influencing responses. An explanation was also given around correct completion of the instruments described below.

The data collection process lasted approximately 30 minutes. The present study was approved by the Ethics Committee of the University of Deusto.

Measuring instruments

Two techniques were used to gather data, namely, identifying situations and emotions, and listing thoughts (Cacioppo et al., 1997). Students were presented with the details included in Table 1. Each student was asked to

fill in a blank table (with the headings shown in Table 1). Table 1, below, shows the responses provided by two participants on the same topic in order to illustrate the procedure and compare responses.

Table 1. Information requested from students and format of the measuring instruments

		Female student 1	Male student 2
Describe social situations in which you felt you were treated unequally because you were a man or a woman. Then describe everything that went through your mind at that time and the emotions you felt.			
Self-perceived significant situation	▼	When we were 16, we used to go to nightclubs and girls got in for free and boys did not.	When I go to a nightclub I have to pay and women do not.
Thought list	▼	They treat us as if we are consumer goods. We are sold to the boys. And we are so stupid that we go in.	This is not fair! Why do I have to pay and girls don't? What the hell is this?
Associated emotions	▼	Rage	Indignation

Identifying situations and emotions

Firstly, a series of situations were identified by participants, in which they described events and experiences that they considered to be important. Some studies have found that when a stimulus or situation is important to an individual there is a greater cognitive response and more thoughts can be obtained (Cacioppo et al., 1997; Larruzea-Urkixo et al., 2020). Thus, it was decided that the students should describe the situations they perceived as being most representative of gender discrimination in their daily lives. Along with the description of these situations, they were also asked to identify the emotions they experienced in these situations (see Figure 1).

Listing thoughts

The thought-listing technique involved asking participants to make a list of all the ideas and thoughts that came to mind at a given point in time. Their self-talk provided information about the way in which they viewed the world, their coping processes in response to different challenges and circumstances involved, as well as the motives and cognitive structures used to cope with the situation (Cacioppo et al., 1997; Larruzea-Urkixo et al., 2020).

Data analysis

Content analysis of the identified situations was done using IRaMuTeQ software. This choice was based on evidence that it is a rigorous procedure for text analysis (Amaral-Rosa, 2019; Montero & Ortiz, 2021), as shown by several studies in the field of educational psychology (Ormeño, 2016) and social psychology (Díaz-Iso et al., 2019).

In order to meet the first objective, top-down hierarchical classification (THC) was performed as a global approach to the corpus (Reinert, 1990) and provide statistically independent similarity classes. These classes represented the general word meaning and referred to social representations about the object of study. Moreover, classes could be interpreted thanks to their profiles, which were characterised by specific inter-correlated forms. Correspondence factor analysis was also carried out in order to supplement the outcomes of the previous algorithm and provide greater accuracy. This analysis was based on the word cloud produced that constituted a corpus and determined the factors that served as a basis for the distribution of statistically independent word classes (forms). The concept of class membership is based on

distance from an inertia axis. Graphical representations are two-dimensional meaning they are divided into two factors (Ormeño, 2016). This means that agreement between forms can be observed according to their position on the axes.

The second objective was addressed using two algorithms. Top-down hierarchical classification (THC) was used to calculate the relationship between each theme or lexical world and the independent variables. In cases where a significantly higher proportion of elementary contextual units (ECUs) belonged to a class where the level of an independent variable was higher than all other levels combined, classes and independent variables were considered to be associated (Klein & Licata, 2003). Specificity analysis was also carried out, which consisted of the specification of independent variables and gathered data.

Results

First objective: self-perception of situations, thoughts and emotions

THC divided the entire corpus into 229 ECUs. Outcomes of the analysis (Figure 1) show two main clusters. The first was more focused on different aspects of discrimination against women (classes 1, 2 and 3), whilst the second was more linked to a specific situation in which men felt discriminated against (class 4), although several female participants also recognised these situations as being forms of discrimination against women.

In the first cluster, the first class, 'activities associated with each gender' (29.26% of the total corpus) was mainly linked to perceptions and assessments of daily leisure time. Women reported feeling sad and angry that they were discriminated against because they perceived that some tasks and activities were associated with a certain gender. Women felt that they were as capable as men of playing 'sport' (p= .0002). These situations of discrimination were seen as 'injustices' (p= .0016), as illustrated by the following ECUs: 'Why are men supposed to like sport whilst women do it for aesthetic reasons? Can't they play sport just for aesthetic reasons and us women do it just because we like it? So unfair!' (female, third year, medium academic performance; χ^2= 60.81). Similarly, although to a lesser extent, men also disagreed with this attribution of gender stereotypes: 'When I'm told that because I'm a boy I have to be stronger when doing sport, not like the girls. They can do sport too and they are not asked that' (male, first year, unspecified academic performance; χ^2= 43.83). This class also revealed that women had to 'do' (p= .0001) more 'chores' (p= .006) or more 'things' (p.= 017) at 'home' (p= .03): 'Having to tidy up or do more things at home. We are all equal! Why do I have to do it? It makes me so angry!' (female, fourth year, high academic performance; χ^2= 33.91).

The second class, 'women's poorer driving skills' (27.66% of the total corpus), was linked to discriminatory situations due to the ability beliefs about women's poorer driving skills (p= .0002). This belief was identified as discriminatory mostly by women, although some men also recognised it as such: 'When they say that if it's a female driver, she's probably driving badly. Bastards! I'm sure I drive better than some men. It makes me really angry!' (female, second year, medium academic performance; χ^2= 84.15); 'One day in the car we had a scare on the road caused by another car. A guy in our class said: 'Woman at the wheel, danger I feel'. This kid is always talking nonsense' (male, fourth year, medium academic performance; χ^2= 55.02).
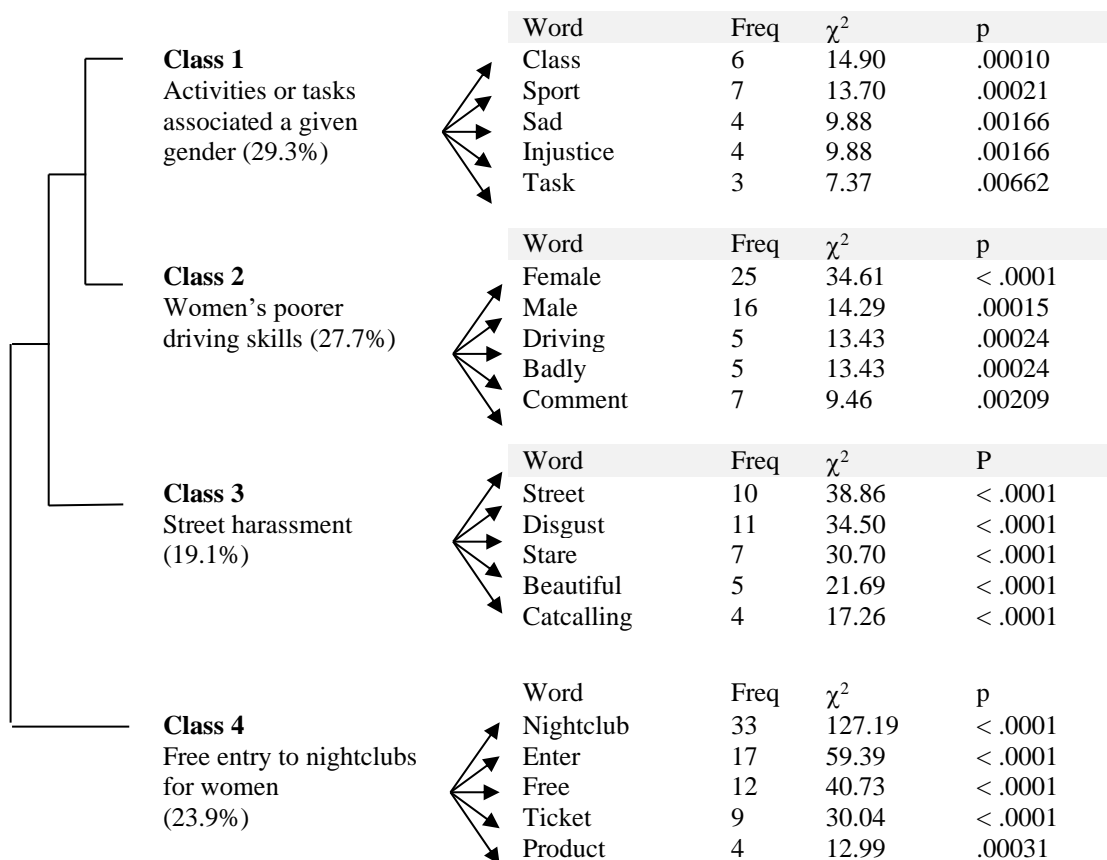
The third class, 'verbal harassment and leering experienced by women on the street' (19.1% of the total corpus), was linked to unwanted sexualised comments directed at women, colloquially called 'catcalling' (p= <.0001). This behaviour takes place in public spaces (p= <.0001) and causes women to have feelings of impotence (p= .009) and disgust (p= <.0001). The following ECUs reflected some of these situations: 'I'm walking down the street and as I go past a man, he says to me: Turn around, gorgeous' and things like that. What? What's the deal, man? Yuck, it's disgusting' (female, third year, high academic

performance; χ^2= 103.32); 'Walking down the street and being wolf-whistled at or catcalled. I, foolishly, say nothing and keep walking. I would tell him a couple of things, but what if he turns on me...)' (female, fourth year, medium academic performance; χ^2= 76.46). This class was statistically significant for females (p= .02).

The second cluster contained the fourth class, 'free entry to nightclubs for women' (23.9% of the total corpus), which described entry to 'nightclubs' (p= <.0001) being 'free of charge' (p= <.0001) or cheaper for women. Men were indignant (p= .012) and complained about this situation: 'In clubs girls are let in for free and boys are made to pay the entrance fee, even though we are all part of the same group. Then they talk about sexism, I'd demand an explanation from more than one person ...' (male, third year, high academic performance; χ^2= 295.99); 'In life in general, I think it is

shameful that boys are charged for entering nightclubs and girls are not. And, on top of that, there are girls who complain about sexism and then they are the first ones to take advantage of this' (male, second year, medium academic performance; χ^2= 254.67). From their standpoint, female students also identified this situation as being discriminatory. They held different views on the matter: 'They treat us as if we are consumer goods, they sell us to the boys. And, on top of that, we are so stupid that we go in' (female, second year, medium academic performance. χ^2= 260.46); 'Girls get into discos for free just to encourage boys to go. We are just a product for sale. It seems that saving yourself some money is worth more than getting respect' (female, third year, medium academic performance; χ^2= 267.66). This class was statistically significant for males (p= .02).

Figure 1. Dendrogram of the classes produced from top-down hierarchical classification

Class 1
Activities or tasks associated a given gender (29.3%)

Word	Freq	χ^2	p
Class	6	14.90	.00010
Sport	7	13.70	.00021
Sad	4	9.88	.00166
Injustice	4	9.88	.00166
Task	3	7.37	.00662

Class 2
Women's poorer driving skills (27.7%)

Word	Freq	χ^2	p
Female	25	34.61	< .0001
Male	16	14.29	.00015
Driving	5	13.43	.00024
Badly	5	13.43	.00024
Comment	7	9.46	.00209

Class 3
Street harassment (19.1%)

Word	Freq	χ^2	P
Street	10	38.86	< .0001
Disgust	11	34.50	< .0001
Stare	7	30.70	< .0001
Beautiful	5	21.69	< .0001
Catcalling	4	17.26	< .0001

Class 4
Free entry to nightclubs for women (23.9%)

Word	Freq	χ^2	p
Nightclub	33	127.19	< .0001
Enter	17	59.39	< .0001
Free	12	40.73	< .0001
Ticket	9	30.04	< .0001
Product	4	12.99	.00031

Factorial correspondence analysis provided specific information to complement that obtained from top-down hierarchical analysis in order to address study's first objective.

Figure 2. Factorial correspondence analysis of perceptions of discrimination
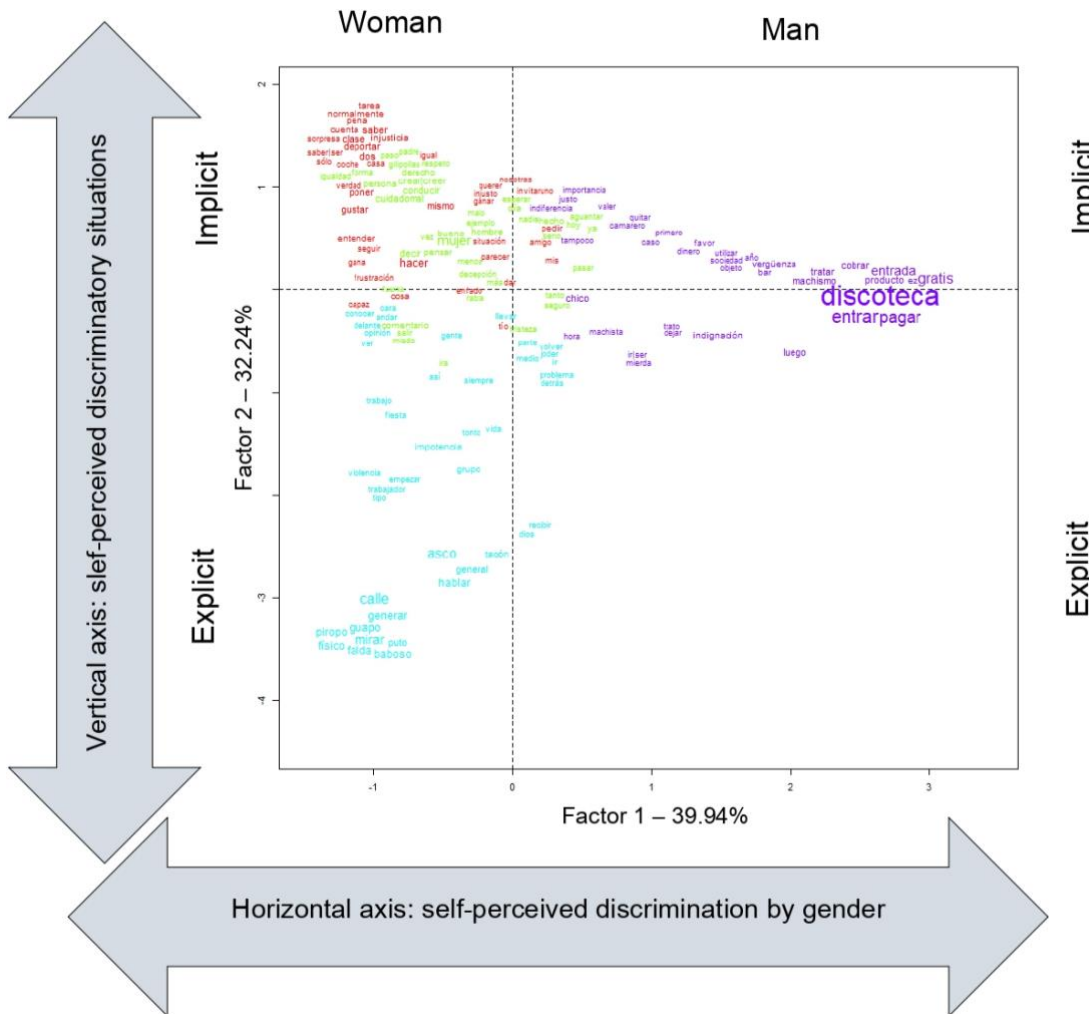
Notes: iRaMuTeQ software does not produce an editable figure. Translations of the terms used (Freq > 7) are, therefore, provided below: *discoteca* – nightclub; *entrar* – enter; *pagar* – pay; *gratis* – free; *calle* – street; *asco* – disgust; *mirar* – stare; *comentario* – comment; *sport* – deporte

Looking at the horizontal or x-axis, it can be seen that the first factor, which accounted for 39.94% of the total corpus, divided the classes obtained according to the gender that was perceived as being discriminated against in each situation. In this sense, it separated class 4, 'free entry to nightclubs for women', located on the negative horizontal axis and meeting the situation criteria of discrimination against men, from the reaming classes ('activities associated with gender', 'women's poorer driving skills' and 'verbal harassment and leering experienced by women on the street'). These situations, located on the negative horizontal axis, were perceived as being discriminatory towards women.

The second factor, which made up 26.97% of the total corpus, focused on the nature of perceptions of discrimination situations and is seen by examining the vertical axis. Here, classes 1, 2 and 4, mostly located on the

positive vertical axis, are clearly separated from class 3. Thus, 'activities associated with gender' (class 1), 'women's poorer driving skills (class 2) and (albeit with a greater centralised tendency) 'free entry to nightclubs for women' (class 4) are linked to situations of implicit discrimination or more subtle or underlying forms of discrimination. In contrast, 'verbal harassment and leering experienced by women on the street' (class 3) is a more explicit, visible and noticeable form of aggression.

Thus, when analysing present outcomes considering the combination of these factors, it can be deduced that implicit situations of discrimination against women, or those that may go more unnoticed (positive vertical and horizontal axes), are women's alleged poorer driving skills and perceptions of greater abilities for certain activities depending on gender. Moving on to implicit discrimination (negative vertical and horizontal axes), free entry to nightclubs for women was perceived as a form of implicit discrimination against

men. In terms of the most visible and explicit discrimination, it was shown that women experience verbal harassment and leering on the street (negative vertical and horizontal axes), which is a tangible and observable form of discrimination. In contrast, no explicit discrimination was observed against men (negative horizontal axis and positive vertical axis).

Second objective: analysis of independent variables

Specificity analysis was conducted to investigate the independent variables and self-reported emotions pertaining to discriminatory situations. Figure 3 illustrates gender differences. As can be seen, all emotions, i.e., rage (fi_{women}= 13.37‰; fi_{men}= 8.95‰), anger (fi_{women}= 8.81‰; fi_{men}= 4.31‰), disgust (fi_{women}= 4.86‰; fi_{men}= 0‰) and fury (fi_{women}= 3.04‰; fi_{men}= 0.99‰) were identified more frequently by female students than male students.

Figure 3. Specificity analysis according to gender
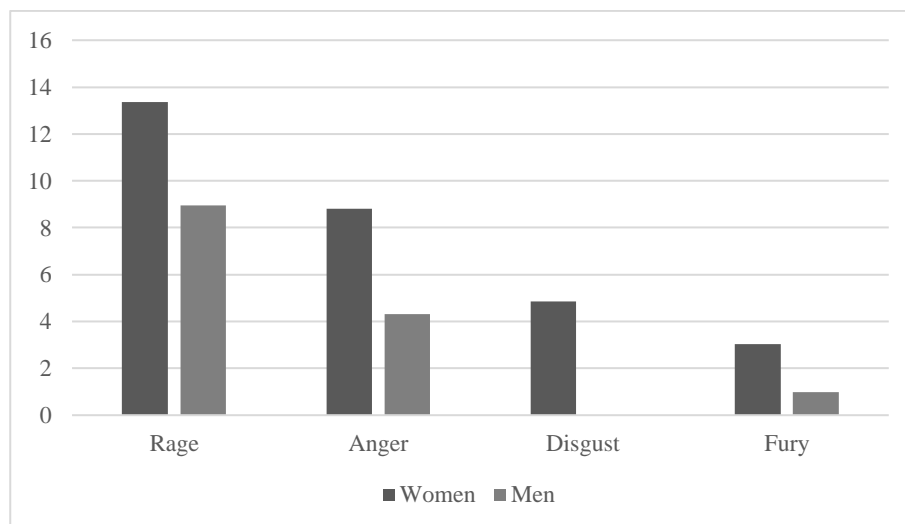
In terms of academic performance, rage ($fi_{high\_performance}$ = 11.84‰; $fi_{medium\_performance}$ = 6.73‰; $fi_{low\_performance}$ = 14.44‰; $fi_{unspecified\_performance}$ = 5.35‰) and anger ($fi_{high\_performance}$ = 13.76‰; $fi_{medium\_performance}$ = 12.49‰; $fi_{low\_performance}$ = 14.44‰); $fi_{unspecified\_performance}$ = 5.35‰) were the most

often identified emotions, whereas disgust ($fi_{high\_performance}$=5.26‰; $fi_{medium\_performance}$=3.84‰; $fi_{low\_performance}$= 3.61‰; $fi_{unspecified\_performance}$= 0‰) and fury ($fi_{high\_performance}$ = 1.32‰; $fi_{medium\_performance}$ = 1.92‰; $fi_{low\_performance}$ = 7.33‰; $fi_{unspecified\_performance}$ 0=) were less often

identified by the students. As can be seen in Figure 4, no gradual progression was seen in performance. It can also be observed that students who identified anger, rage and fury more frequently had lower academic achievement.

Figure 4. Specificity analysis according to academic performance
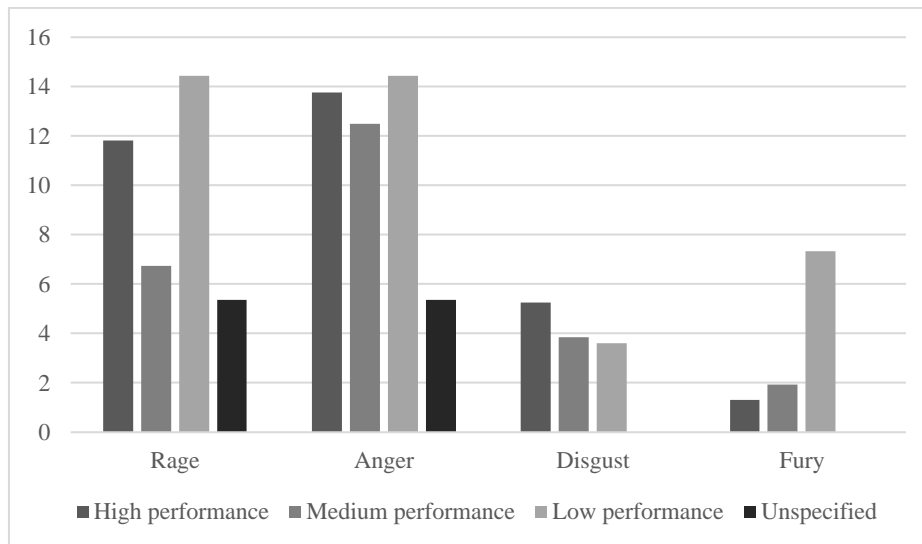
Differences according to degree year are shown in Figure 5. It was observed that rage (fi_{first}= 10.87‰; fi_{second} = 11.38‰; fi_{third} = 12.74‰; fi_{fourth} = 20.89‰) and anger (fi_{first}= 5.85‰; fi_{second} = 5.69‰; fi_{third} = 12.74‰; fi_{fourth} = 18.26‰) were perceived to a greater extent. Moreover, it was found that, as the academic years progressed, these emotions were also identified to a greater extent. Disgust (fi_{first}= 0.84‰; fi_{second} = 4.60‰; fi_{third} = 7.64‰; fi_{fourth} = 0‰) and fury (fi_{first}= 6.69‰; fi_{second} = 0.52‰; fi_{third} = 1.27‰; fi_{fourth} = 2.61‰) were identified to a lesser extent and bucked the trend of being increasingly perceived with advancing degree years.

Figure 5. Specificity analysis according to degree year
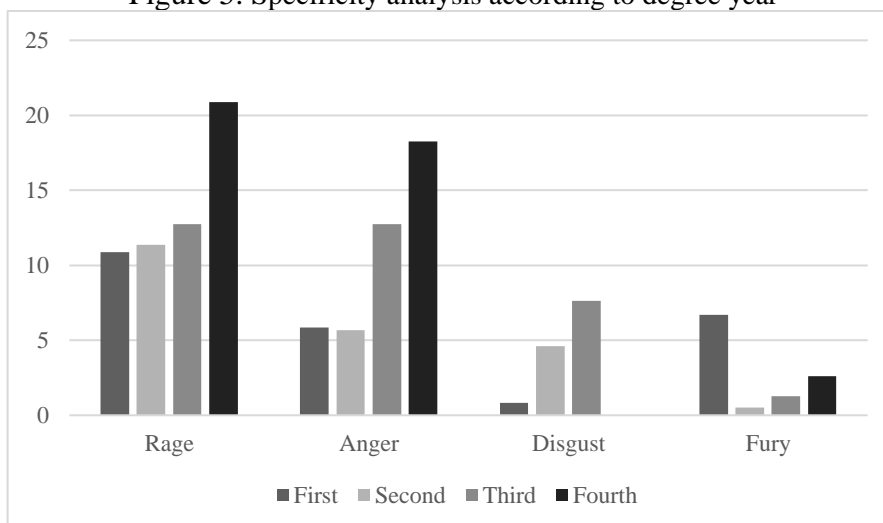
Discussion

Outcomes of the present study provide specific information about prospective teachers' perceptions of the gender discrimination they experience in their daily lives. Specifically, different perceptions of discrimination, and different perspectives according to gender, were found in a range of everyday situations that demonstrated different forms of discrimination against women in different social spheres and through different means.

First objective: perception of situations, thoughts and emotions

The first objective of the present study was to identify discriminatory gender-based situations, as well as the thoughts and emotions associated with them. Findings reveal that women experience discrimination on a daily basis and gender stereotypes are deeply ingrained within society. Class 1, 'activities associated with gender' attributed domestic tasks to women and generated controversy in the field of sport, as reported in other research (Connell, 2020; Hagqvist et al., 2017; Larruzea-Urkixo et al., 2021).

Focusing on the public sphere, the situation most strongly perceived as discriminatory by both male and female participants was linked to nightlife leisure spaces. Class 4, 'free entry to nightclubs for women' found that both men and women recognised free access to these nightlife venues as forms of discrimination, in line with what has been shown previously (Burgos et al., 2018). Some female participants felt angry due to the perception that they were being used to support an unequal model of socialised sexuality. Other female students recognised that they 'took advantage' of this marketing strategy because it represented a benefit in some way.

Likewise, class 3, 'verbal harassment and leering experienced by women on the street', focused on street harassment of women and was recognised as a visible and explicit form of violence by female participants, as has been found in previous research, including in university settings (Flores-Hernández et al., 2016; Medina et al., 2015). The fact that this class was only identified by women reinforces the idea that these forms of discrimination are largely directed at, and strongly felt by women, but are not identified or recognised by men. This suggests the need to de-naturalise these behaviours and to work on self-recognition processes with men, as indicated by the Noctambul@s Observatory in its latest report (Burgos et al., 2018).

Class 2, 'women's poorer driving skills', reflects the social belief that women are worse drivers, as also reported by previous studies (Berger, 1986; Simon & Corbett, 2007), despite the fact that male drivers have been found to be more impulsive, aggressive and even more likely to crash. Furthermore, it should be noted that social stereotyping of women as being worse drivers than men may result in a real deterioration of their driving skills (Yeung & Von Hippel, 2008).

In terms of self-talk and emotions, the most predominant relate to the anger family of emotions (Bisquerra, 2009), such as rage, disgust and fury. These results are in line with the findings of a recent study that analysed gender discrimination in university classrooms (Larruzea-Urkixo et al., 2021), serving to broaden understanding of the emotions experienced by women. In previous studies, women reported self-talk that fundamentally tended towards depression and anxiety (Calvete et al., 2005; Calvete & Cardeñoso, 2002; Díaz-Iso et al., 2020; Ramos & Moral, 2014), whilst men had more thoughts and emotions related to anger (Calvete & Cardeñoso, 2002). Changes in thoughts can be perceived through self-talk as it significantly reflects social changes.

Second objective: analysis of independent variables

The second objective focused on exploring differences according to gender, academic achievement and degree year. In all three cases, anger and rage were found to be the most commonly perceived emotions. Looking at each of the independent variables individually,

with regards to gender, women identified emotions associated with the anger family to a greater extent than their male counterparts in all cases. This finding not only confirms but, also, reinforces what was found using top-down hierarchical classification, which showed self-talk and emotions associated with the anger family of emotions. A study that explored perceptions of gender discrimination at university (Larruzea-Urkixo et al., 2021) found that women also expressed more angry emotions and thoughts than their male peers. This finding completes, updates and expands the image of women as individuals who fundamentally have thoughts of anxiety and depression, as reported in studies addressing gender differences in the field of clinical psychology (Calvete et la., 2005).

In the case of academic performance, no clear trend was observed for all the emotions that make up the anger family, although it was found that students with poorer academic performance identified this emotion more frequently than students with better academic performance.

Finally, the year of study being undertaken was also not found to be a factor. However, an upward trend was observed with a notable increase in anger and rage in the fourth year, as found in another recent study (Larruzea-Urkixo et al., 2021). The absence of differences according to degree year may be due to the fact that study participants were from a limited age group, as has been shown in other studies (Mosteiro García & Porto Castro, 2017).

Conclusion

The present study contributes to understanding of perceptions of gender discrimination in present society by considering the cognitive and emotional component of prospective teachers, as well as considering important independent variables.

In general, it can be stated that this type of discrimination was directed towards women in all the situations identified by both male and female participants. It is worth noting that most

of the situations perceived to be important take place in the public sphere, with 'free entry to nightclubs for women' being the most significant. 'Street harassment' was only recognised as discriminatory by women. To a lesser extent, the perception of 'women's poorer driving skills' was reported by both men and women. In the private sphere, it was shown that perceived situations of discrimination associated with traditional roles persist. These included women's poor sporting skills or the assumption that domestic chores are to be carried out by women; however, these forms of discrimination have subtle nuances that are embedded in social dynamics to a larger extent than those observed in the public sphere. With regards to the independent variables, fury, anger, rage and disgust, these were felt to a greater extent by female participants than by their male peers.

All of the above points to the fact that gender discrimination is widely perceived in present society and that it is mostly aimed at women. Overall, participating male students identified fewer situations in which they felt discriminated against and, when they did, discrimination was limited to one-off events, whereas women reported repeated and frequent situations. One possible explanation is that men respond by strategically exaggerating perceptions of discrimination as a means of improving how they feel.

While the present study included some novel elements, it also has limitations. On the one hand, data were collected from a single university faculty, that of Education. Having participants from different teacher training institutions would have provided a broader view of the phenomenon and would have made comparisons possible. The methodological design could have been enriched by the use of other qualitative techniques such as focus group discussions or semi-structured interviews. A mixed approach with quantitative techniques could also have been adopted to provide a more complete picture of inequality in present society.

Some avenues of research for the future emanate from the above-mentioned constraints. Thus, it is proposed that the study could be replicated in other faculties of education, both in Spain and in other countries, in order to identify differences and similarities regarding perceptions of gender discrimination. In addition, it would be useful to include other data collection techniques in order to gain a deeper insight into the experiences of participants.

In view of the above, it can be stated that discrimination against women is an unresolved issue in current society. In conclusion, the importance of strengthening existing initiatives for gender equality and developing new ones is emphasised. Gender equality should be built jointly by men and women and its progressive implementation should be reflected in self-talk.

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Authors / Autores
Larruzea Urkixo, Nerea (larruzeaurkixo.nerea@gmail.com) 🆔 0000-0002-0559-2768   PhD in Psychodidactics at the University of the Basque Country (UPV/EHU). After working as a Primary Education teacher, she is currently working as a specialist consultant at the Basque Institute for Educational Evaluation and Research (ISEI-IVEI) and as a lecturer in the Department of Developmental and Educational Psychology at the UPV/EHU. Her lines of research focus on self-talk, emotional regulation and self-regulated learning in Higher Education, as well as on the influence of gender on these variables.
Díaz-Iso, Ariane (ariane.diaz.iso@deusto.es) 🆔 0000-0003-0271-1394   PhD in Education at the University of Deusto and she is a master's degree in Advanced Studies in Language, Communication and its Pathologies from the University of Salamanca. She is currently working as a lecturer at the Department of Education at the Faculty of Education and Sport at the University of Deusto. She teaches undergraduate courses in Primary Education and Physical Activity and Sports Sciences. She is also a member of the Educational Innovation Unit of the same university. Her research areas are teaching innovation, competence development and evaluation in higher education and teaching and learning methods related to humanism and sustainability.
Velasco Luzuriaga, Erlantz (erlantz.velasco@deusto.es) 🆔 0000-0002-4554-9852   PhD in Education by the University of Deusto, studies that he completed in collaboration with the University of Buenos Aires (UBA) and the UNESCO Chair in Reading and Writing. He is currently a professor in the Department of Education of the Faculty of Education and Sports at the University of Deusto. He teaches in the degree of Primary Education and in the double degree of CAFyD and Primary Education. His lines of research focus on teaching and learning processes in Social Sciences, as well as academic writing, academic genres and specialized discourse.
Cardeñoso Ramírez, Olga (mariaolga.cardenoso@ehu.eus) 🆔 0000-0003-4418-0405   Professor in the Department of Developmental and Educational Psychology at the University of the Basque Country (UPV/EHU). Belonging to the doctorate in Psychodidactics, she leads a line of research called "Self-regulated Learning. Cognition, emotion and gender". She has published numerous national and international articles related to the impact that cognitions, self-regulated learning, and gender have on people's healthy and pathological behavior at different moments of the life cycle. He has also published books and book chapters on adolescent abuse, literary psychology, and the study of psychological archetypes in our modern societies.

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